

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2000-51

GENERAL WASTE DISCHARGE REQUIREMENTS

FOR

ADDITION OF OXYGEN RELEASING COMPOUNDS TO GROUNDWATER

1. The California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), finds that:
2. The California Water Code provides that all persons discharging waste or proposing to discharge waste that could affect the quality of waters of the state file a report of waste discharge with the Regional Water Board, and submit the appropriate filing fee.
3. The addition of oxygen releasing compounds to groundwater can be an effective treatment technology capable of reducing the levels of contaminants in groundwater. Oxygen releasing compounds generally consist of magnesium peroxide, calcium peroxide, hydrogen peroxide, permanganates, or other similar compounds. All the compounds are applied to aid in the remediation of petroleum hydrocarbons and other similar contaminants found in groundwater. The addition of any oxygen releasing compound to groundwater may result in unintended secondary impacts to water quality. Any potential adverse water quality impacts are localized, short-term, and do not impact any current or prospective uses of groundwater. Groundwater quality will be monitored before addition of the oxygen releasing compounds, during treatment, and after treatment is completed to verify no adverse impact to water quality.
4. The Regional Water Board Water Quality Control Plan for the North Coast Region (Basin Plan) includes water quality objectives and receiving water limitations.
5. Beneficial uses of groundwaters in the North Coast Region include:
 - a. domestic water supply
 - b. agricultural water supply
 - c. industrial service supply
 - d. industrial process supply
6. A negative declaration for the issuance of these general waste discharge requirements was prepared and approved by the Regional Water Board on July 27, 2000 to satisfy the requirements of the California Environmental Quality Act. The Regional Water Board has considered the negative declaration.

7. The Regional Water Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
8. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
9. The permitted discharge is consistent with the antidegradation provision of State Water Resources Control Board Resolution No. 68-16. The impact on existing water quality will be insignificant.

THEREFORE, IT IS HEREBY ORDERED that persons filing a notice of intention to be regulated (hereinafter the discharger) under the provisions of these general Waste Discharge Requirements Order No. R1-2000-51, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. CONDITIONS OF APPLICATION

1. The discharger shall submit a complete report of waste discharge describing the proposed action including, but not limited to the following: the background water quality of the aquifer into which the oxygen releasing compounds will be added, including contaminant types, chemical oxygen demand, pH, nutrients, dissolved oxygen, dissolved carbon dioxide, groundwater temperature, iron, oxygen reduction potential, and hydraulic conductivity; characterization of the nature of the groundwater plume; description of the treatment system; and description of the nature and volume of any chemical additives. The report of waste discharge also needs to include information on the possibility of any adverse impacts to groundwater quality, and whether the impacts will be localized and short-term, and not adversely affect any current or projected uses of the water during the time that impacts are being realized.
2. The discharger shall submit a monitoring proposal to monitor the effectiveness of the treatment system and groundwater quality. The monitoring proposal shall describe the locations to be sampled and will include, but not be limited to the following: an up gradient sampling point, a down gradient sampling point, and sampling points within the contaminated zone, and address the nature of the oxygen releasing compounds and the treated chemicals and any associated breakdown products.
3. The discharger shall submit a sensitive receptor study that includes, but is not limited to: identifying all sensitive receptors within 1500 feet, all beneficial uses of groundwater, and other pertinent information for the specific site.
4. The discharger shall publish a Notice of Intent to comply with these waste discharge requirements in a newspaper of general circulation in the affected area,

- post a copy of the notice at the site in a prominent location(s), and shall provide notice to contiguous property owners and any interested parties.
5. These Waste Discharge Requirements shall not take effect until the Executive Officer notifies the Discharger in writing that the Waste Discharge Requirements have been issued. The Executive Officer shall not issue the Waste Discharge Requirements until thirty days after the discharger has filed a complete Report of Waste Discharge and published the Notice of Intent. The Waste Discharge Requirements shall not be issued if the Executive Officer finds that there may be significant impacts to water quality, or finds that significant public controversy has arisen or will likely arise from the issuance of these requirements and that these requirements should be considered at a regularly scheduled Regional Water Board meeting.

B. DISCHARGE PROHIBITIONS

1. The discharge of any waste not specifically regulated by this Order or other Order issued by the Regional Water Board is prohibited.
2. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC), is prohibited.
3. The discharge of waste to land that is not under the control of the discharger is prohibited.

C. PROVISIONS

1. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel.
2. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

3. Operation and Maintenance

The discharger must maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

4. Change in Discharge

The discharger must promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

5. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger must notify the succeeding owner or operator of the following items by letter, a copy of which must be forwarded to the Regional Water Board:

- a. existence of this Order, and
- b. the status of the dischargers' annual fee account

6. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from his liability under federal, State, or local laws, nor create a vested right for the discharger to continue the waste discharge.

7. Monitoring

The discharger must comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program issued for this specific discharge, and any modifications to these documents as specified by the Executive Officer. Such documents are incorporated herein. Chemical, bacteriological, and bioassay analyses must be conducted at a laboratory certified for such analyses by the State Department of Health Services.

8. Inspections

The discharger shall permit authorized staff of the Regional Water Board:

- a. entry upon premises in which an effluent source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. inspection of monitoring equipment or records; and
- d. sampling of any discharge.

9. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;

- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the discharger must notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

10. Revision of Requirements

The Regional Water Board may review this Order periodically and may revise requirements when necessary. In addition, the discharger shall file a report of waste discharge with the Executive Officer at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

Certification

I, Lee A. Michlin, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on July 27, 2000.

Lee A. Michlin
Executive Officer